

## Term "nano" in electroanalysis: A trendy prefix or a new stage of its development?

Budnikov H., Shirokova V.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

---

### Abstract

The use of term "nano" in electroanalytical methods (electroanalysis) is considered. Attention is paid to the recent trend in the development of electroanalysis in context of modern views on processes in the double electric layer, or interface, as a nanosize structure in an electrochemical nanoreactor determining the nature of the analytical signal. It is shown that the creation of new methods of chemical analysis of usual objects using nanostructures, nanosystems, and nanomaterials immobilized in an electrochemical interface has favored the development of nanoelectroanalytics. The use of terms with the prefix nano- in electroanalysis and some nanotechnologies is considered. It was noticed that the nomenclature in the nanofield has not been established yet. Not only the available terms should be refined and formulated, but also those that have not been adequately translated into Russian. With the application of nanotechnologies, electroanalysis follows the world trend in the choice of priority objects of analysis. © 2013 Pleiades Publishing, Ltd.

<http://dx.doi.org/10.1134/S1061934813080030>

---

### Keywords

detection and identification methods, determination methods, electrochemical methods, nanoanalysis, nanoanalytics, nanobiosensor, nanocluster, nanoelectroanalysis, nanoelectrode, nanoreactor, nanotechnology